

T04D06 – (4.4) Metallic Bonding

Name.....

1. 4.4.1 Describe the metallic bond as the electrostatic attraction between a lattice of positive ions and delocalized electrons. (2)
 - a. What are delocalized electrons?

 - b. Define Metallic Bonding:

 - c. Diagram/Illustrate Metallic Bonding:

2. 4.4.2 Explain the electrical conductivity and malleability of metals. (3)
 - a. Metals are known to be ductile and malleable as well as excellent conductors of heat and electricity, define each of the following:
 - i. Ductile:

 - ii. Malleable:

 - iii. Conductivity:

 - b. When a stress is applied to a metal, layers of atoms may slide over one another, diagram and explain this process:

 - c. Diagram/Illustrate what makes metallic compounds conductive: